

# ABB BALDOR RELIANCE III

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## Customer information packet

### D50500R-BV

500HP, 1750RPM, DC, C4412ATZ, DPG-FV,

**Specifications**

|                                 |                         |
|---------------------------------|-------------------------|
| <b>Enclosure</b>                | DP                      |
| <b>Frame</b>                    | C4412ATZ                |
| <b>Frame Material</b>           | Steel                   |
| <b>Output Power</b>             | 500.000 HP              |
| <b>Agency Approvals</b>         | CCSA US                 |
| <b>Ambient Temperature</b>      | 40 °C                   |
| <b>Bearing Grease Type</b>      | Polyrex EM (-20F +300F) |
| <b>Drip Cover</b>               | No Drip Cover           |
| <b>Feedback Device</b>          | NO FEEDBACK             |
| <b>Field Winding Type</b>       | STR. SHUNT              |
| <b>Frame Prefix</b>             | C                       |
| <b>Heater Indicator</b>         | No Heater               |
| <b>Lifting Lugs</b>             | Standard Lifting Lugs   |
| <b>Motor Standards</b>          | NEMA                    |
| <b>Mounting Arrangement</b>     | F2                      |
| <b>Overall Length</b>           | 58.32 IN                |
| <b>Shaft Extension Location</b> | Pulley End              |
| <b>Shaft Ground Indicator</b>   | No Shaft Grounding      |
| <b>Shaft Slinger Indicator</b>  | No Slinger              |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | DC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | G9048A D   |
| <b>Layout</b>       | 616492-001 |
| <b>Eff. date</b>    | 11-14-2023 |
| <b>CD Diagram</b>   | 406770-006 |
| <b>Poles</b>        | 00         |
| <b>Leads</b>        |            |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 04-09-2015 |

**Nameplate**

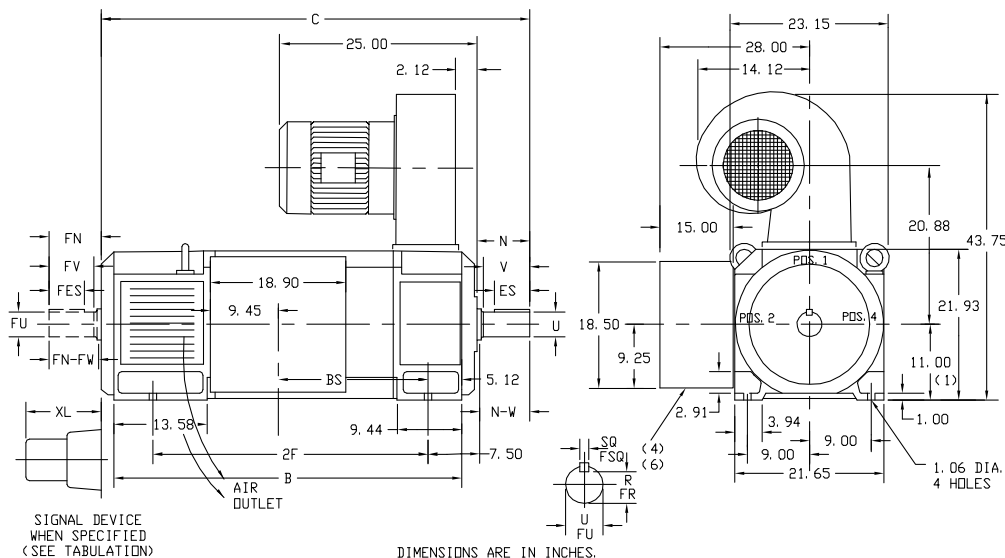
| 000613006HP       |            |             |             |       |      |  |  |    |  |
|-------------------|------------|-------------|-------------|-------|------|--|--|----|--|
| CAT.NO.           | D50500R-BV | SPEC NO.    | T44T1305    |       |      |  |  |    |  |
| FR                | C 4412ATZ  | HP          | 500         | DUTY  | CONT |  |  |    |  |
| ENCL.             | DP         | RPM         | 1750/2050   | S.F.  | 1.0  |  |  |    |  |
| ENCL MOD          | FORCE VENT | VOLTS       | 500         | INSUL | F    |  |  |    |  |
| MAX SAFE SPEED    | 03000      | AMPS        | 797.00      | AMB.  | 40   |  |  |    |  |
| FIELD DATA        |            | SER.NO.     |             |       |      |  |  |    |  |
| WINDING           | STR. SHUNT | POWER CODE  | C           |       |      |  |  |    |  |
| VOLTS             | 300        | D.E. BRG.   | 110BC02J30X |       |      |  |  |    |  |
| MAX AMPS @ 25 C   | 10.87      | O.D.E. BRG. | 95BC02J30X  |       |      |  |  |    |  |
| HOT AMPS          | 7.84/5.59  | MIN. AMB.   | 0           | TYPE  |      |  |  | TR |  |
| BRUSH:419904052BK |            |             |             |       |      |  |  |    |  |

ENCLOSURE: DRIP PROOF FULLY GUARDED  
SPLASHPROOF  
MOUNTING: FOOT

COOLING: FORCE VENTILATED WITH  
INTEGRAL BLOWER & MOTOR

ACCESSORIES: FLANGE MOUNTED  
TACHOMETER

FRAME C4412ATZ - C4414ATZ



SIGNAL DEVICE  
WHEN SPECIFIED  
(SEE TABULATION)

DIMENSIONS ARE IN INCHES.

| FRAME     | DUTY    | C     | BS    | B     | 2F    | DRIVE END SHAFT AND KEY |      |       |      |       |       | (S) OPPOSITE DRIVE END SHAFT AND KEY |      |       |        |      |       | WT.<br>(LBS) |      |      |
|-----------|---------|-------|-------|-------|-------|-------------------------|------|-------|------|-------|-------|--------------------------------------|------|-------|--------|------|-------|--------------|------|------|
|           |         |       |       |       |       | N                       | N-W  | C/2   | V    | R(3)  | SQ    | ES                                   | FN   | FN-FW | FUC(2) | FV   | FR(3) |              | F3SQ | FES  |
| C4412ATZ  | COUPLED | 58.32 | 19.81 | 46.56 | 36.00 | 7.62                    | 7.25 | 3.625 | 7.00 | 3.134 | .875  | 5.75                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 3245 |
| UC4412ATZ | BELTED  | 59.32 | 19.81 | 46.56 | 36.00 | 8.62                    | 8.25 | 4.125 | 8.00 | 3.563 | 1.000 | 6.50                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 3275 |
| C4413ATZ  | COUPLED | 62.25 | 23.75 | 50.56 | 40.00 | 7.62                    | 7.25 | 3.625 | 7.00 | 3.134 | .875  | 5.75                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 3660 |
| UC4413ATZ | BELTED  | 63.25 | 23.75 | 50.56 | 40.00 | 8.62                    | 8.25 | 4.125 | 8.00 | 3.563 | 1.000 | 6.50                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 3690 |
| C4414ATZ  | COUPLED | 68.56 | 30.05 | 56.56 | 45.00 | 7.62                    | 7.25 | 3.625 | 7.00 | 3.134 | .875  | 5.75                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 4280 |
| UC4414ATZ | BELTED  | 69.56 | 30.05 | 56.56 | 45.00 | 8.62                    | 8.25 | 4.125 | 8.00 | 3.563 | 1.000 | 6.50                                 | 7.62 | 7.25  | 3.625  | 7.00 | 3.134 | .875         | 5.75 | 4310 |

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                           |                              |                   |
|---------------------------|------------------------------|-------------------|
| REV. DESC: ADD AV56 TO DS |                              |                   |
| REV. LTR: B               | VERSION: 02                  | TDR: 000000865577 |
| FILE: \RGG\00016\134      | REVISED: 02:50:00 08/04/2014 | BY: RGGWT         |
| MTL: -                    |                              |                   |

| SIGNAL<br>DEVICE | XL    | WT.<br>(LBS.) |
|------------------|-------|---------------|
| SPY              | 10.88 | 7             |
| BC-42            | 13.38 | 25            |
| BC-46            | 15.68 | 35            |
| M-627A           | 10.50 | 14            |
| M-628A           | 10.50 | 14            |
| M-727A           | 10.50 | 14            |
| M-737A           | 10.50 | 14            |
| RD-11            | 10.00 | 17            |
| RD-51            | 16.68 | 38            |
| RD-61            | 10.00 | 17            |
| H56              | 10.00 | 17            |
| RE-045           | 2.56  | 5             |
| RE-210           | 15.31 | 17            |
| TG2168A          | 2.56  | 5             |
| TS2014N          | 6.50  | 5             |
| TS2087N          | 11.00 | 17            |
| RD-120           | 1.88  | 5             |
| ST67/RL67        | 2.00  | 5             |
| HS35             | 3.00  | 5             |
| M285             | 3.12  | 20            |
| RPY444           | 11.00 | 15            |
| M3 RD M4         | 3.62  | 10            |
| AV56             | 2.00  | 5             |

- (1) THIS DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCH IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) 'U' AND 'FU' VARY +.000 - .001.
- (3) 'R' AND 'FR' VARY +.000 - .015.
- (4) REMOVEABLE COVER PLATE FOR CUSTOMER DRILLING. TERMINAL BOX CAN BE POSITIONED FOR EITHER TOP OR BOTTOM CONDUIT ENTRY.
- (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
- (6) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, S, W-7 OR C-1 MOUNTING IS SPECIFIED.
- (7) AIR FILTER SUPPLIED ONLY WHEN SPECIFIED.
- (8) BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1,2 OR 4.

